

### **Amendments to the Abstract**

Please replace the abstract of the disclosure with the following rewritten abstract:

#### **Abstract**

#### **COMMUNICATION UNIT AND METHOD OF CHANNEL ESTIMATION IN AN OFDM COMMUNICATION SYSTEM**

A method of channel estimation in a wireless orthogonal frequency division multiplexed (OFDM) communication system is disclosed. The method comprises receiving a signal in the time domain and applying a Fourier transform to the received signal to obtain a frequency domain signal including a plurality of sub-carriers. Then, the method requires estimating probabilities of coded bits for the plurality of frequency domain sub-carriers and performing channel coefficient estimation for the plurality of frequency domain sub-carriers using channel coefficient estimates for another of the plurality of frequency domain sub-carriers.